

BOOK REVIEW

Venomous and Poisonous Animals. A Handbook for Biologists, Toxicologists and Toxinologists, Physicians and Pharmacists

By Dietrich Mebs. Pp. ix + 339. Illustrated. Euro 86.0/Sw.fr. 137.60. Medpharm Scientific Publishers. 2002. ISBN 3-88763-093-9.

This book is a translation and major update of *Mebs Gifttiere* published in 1989. The content is, however, so different from the original, that this is essentially a new book. The translation is excellent, apart from a few quaint phrases, including an amusing acknowledgement of the excellence of the 'Englisch' translation. The design is attractive, with an opening section that introduces toxins and venoms, followed by two major sections covering respectively marine and terrestrial animals. Although short, the first section has a wealth of intriguing information. Examples include the extraordinary diversity of unrelated animals that make use of tetrodotoxin (sea snails, fish, toads, starfish and even birds), the arms race between predators and their prey, and the remarkable array of functions fulfilled by venoms and toxins. The second and third parts run systematically through the major groups of animals, with individual coverage and superb photographs of the most important species.

For most toxins and venoms, there are no antidotes, and practical symptomatic treatments are recommended — reassurance, immobility, elevation of the legs, mouth-to-mouth, external cardiac massage, avoidance of cutting, pressure or tourniquets. Some of the recommendations surprised me, such as the avoidance of heat or cold as a means of treatment, despite the relief they bring and the fact that these treatments are advocated by many other authorities. A strong stance is taken against herbal drugs and treatments by local healers and shamans, and against carrying antivenoms for snakebite because of the risks of degeneration and anaphylactic shock.

For each species or group of animals details are provided about how envenoming takes place, preventive measures, the nature of the venom or toxin, reactions and treatments. Case histories and treatments provide more specific details.

I learnt a great deal from the book and had to discard some long-cherished beliefs about the effectiveness of various treatments. The most important attribute of the book is that it provides a single, authoritative, up-to-date and reasonably comprehensive coverage. Paradoxically, that is also a weakness. Not all of the targeted audience of 'biologists, toxicologists, toxinologists, physicians and pharmacists' embraced in the subtitle of the book will find sufficient detail to satisfy their disparate backgrounds and needs. In fairness, though, the

references that are cited do provide access to more detailed literature.

I found the book attractive, enlightening and a welcome and overdue review of the topic.

George Branch

Advances in End-Stage Renal Disease 2003. Renal Research Institute Seminars

Edited by C Ronco and NW Levin. Pp. iv + 140. Illustrated. CHF 112./EUR80./US\$97.50. Hard Cover. KARGER. 2003. ISBN 3-8055-7535-1.

This is a publication of presentations from a conference held in Miami in January 2003. It appears that the conference is an annual event and specifically concentrates on advances in end-stage renal disease (ESRD). The obvious aim is to provide an update on current technology and therapeutics in renal failure. It will appeal to all nephrologists. Certain sections will be of interest to those cardiologists involved in the management of end-stage renal failure patients. The topics vary but a few points are important.

The point is made that there is an urgent need to include kidney transplant recipients in a comprehensive programme of care (guided by kidney diseases outcomes quality initiative (K/DOQI)). This is with a view to attempt to improve patient outcome post-transplantation — particularly if the transplant fails and the patient returns to dialysis. Little attention is paid to the fact that they have been on steroids and are at increased risk from cardiovascular and bone disease.

There is no doubt that cardiovascular disease is accelerated in renal failure patients. The pathogenesis involves, among others, the effect of anaemia on myocardial function. Congestive heart failure may result from progressive hypoxic cardiac damage. The section dealing with atherosclerosis in ESRD is very well done. Arterial damage in ESRD is accelerated by risk factors that are peculiar to end-stage kidney failure. They are anaemia, secondary hyperparathyroidism and exposure to bioincompatible dialysis membranes. The other novel risk factors are hyperhomocysteinaemia and the acute phase reactants like C-reactive protein, all the cytokines, interleukin B, tumour necrosis factor (TNF) α and interleukin 6. They are independently associated with atherosclerosis and death in ESRD patients. The information presented in Miami underlined the notion that atherosclerosis is an inflammatory condition and that ESRD is actually 'pro-inflammatory'. Therapeutic possibilities such as angiotensin inhibition, anti-lipid agents together with anti-oxidants and antibiotic prescription are mentioned.



The 'old' question as to what constitutes a good assay for parathyroid hormone (PTH) levels in renal failure is once again asked. Again there is no firm conclusion; the second generation PTH assays are not as effective as the first generation immunometric PTH assays in predicting bone histology in patients with ESRD (since they have not been around long enough). This particular section makes for very interesting reading with regard to the difference between the assays.

Peritoneal dialysis (PD) is well covered. The big ADEquacy study in MEXico (ADEMEX study) was discussed at great length and it is interesting to note the criticisms of the study, such as that the rapid transporters and small patients were not included — these excluded patients who had been found to have an increased relative risk of death in other PD studies. The ADEMEX evaluation looked at small solute clearance but not at middle molecule weight clearances and their influence on outcome. There were no evaluation outcomes on patients on cyclical therapies. This should not be too much of a problem for us since, in South Africa, automated therapies are unaffordable by the majority of our chronic renal failure patients. Nevertheless this study was well designed and the message is that one must individualise dialysis prescriptions.

The effect of the glucose in dialysate fluid is discussed; the formation of advanced glycosylated end products (AGE) is considered to be the principal reason for the deleterious changes in the peritoneal membrane. The histological changes in the membrane resemble the pathology found in individuals with longstanding diabetes. Biocompatible dialysis solutions are required to care adequately for our continuous ambulatory peritoneal dialysis (CAPD) patients.

The removal of toxins (extracorporeal blood purification therapies (EBPT)) in 'non-renal critical illness' using, among others, haemofiltration, haemadsorption and haemodialysis is presented. It seems that many of the discussions are still very theoretical and we will need to wait for further studies before there is any clarity on the role of this approach in septic patients.

Charles Swanepoel

We Miss You All — Noerine Kaleeba: AIDS in the Family

2nd edition. Noerine Kaleeba and Sunanda Ray. Pp. xii + 124. Illustrated. US\$8. SAfAIDS. 2002. ISBN 0-7974-2525X.

'AIDS came to my house on the afternoon of the 6th June 1986,' says Noerine in the stark matter-of-fact way which characterises this book. A physiotherapist in Kampala, Uganda,

Noerine's husband Chris was in Hull in the UK doing postgraduate training in education on a British Council scholarship. Doctors in Hull had diagnosed AIDS, at that stage still a relatively new disease, although Uganda was already starting to see the effects of what would become its epidemic.

Chris contracted HIV through a blood transfusion from his younger brother Godfrey in July 1983, after a traffic accident. Godfrey died early in 1984, after a long illness which no-one realised was AIDS. Within months of the transfusion, Chris himself developed a skin rash and sores in his throat, was tired all the time and not his normal self. No-one suspected HIV.

We Miss You All is a searing account of one woman's experience of HIV and AIDS and its effects on her family. Chris died on 23 January 1987, aged only 39. 'He died in a lot of pain,' said Noerine. 'I can't understand why he had so much pain.' This was the beginning of her attempt to come to terms with his death and with the reality of HIV infection in her home and in the community. In a country where the infection was still regarded with fear and suspicion, Noerine decided to come out into the open about HIV in her family. Although HIV negative herself, she chose to live as though she were positive, in her words, 'I chose to live positively'. It was not enough to bring her family through the tragedy. She wanted to do more for others living with the virus. In 1987 The AIDS Support Organisation (TASO) was founded with 16 people, 12 of them living with AIDS. They wanted the word AIDS in the name to break the silence and stigma of the disease.

By 1996, Noerine had done so much against HIV in Uganda that she was approached by UNAIDS to join them in Geneva. She describes her first years at UNAIDS as 'inspirational'. They were a small team dedicated to persuading the United Nations of the importance of the growing pandemic in Africa.

But in spite of her international movements, Noerine never lost sight of her family and AIDS did not stop with her husband. Her sister Rose died of AIDS in 1992, Rose's husband dying soon afterwards. Her sister Harriet's husband also died of the virus, while Harriet struggles to live with HIV. Her brother Andrew, his wife and Noerine's niece were all diagnosed with HIV. Her niece died in 1995. Altogether, she has lost 12 family members to HIV. Noerine now single-handedly looks after the 14 children they left.

The Words 'We miss you all' are inadequate to express the feelings of those left behind in the aftermath of the HIV pandemic in Africa. This little book goes a long way towards bringing a human face to the statistics which now fail to shock, being almost unimaginable.

Bridget Farham